



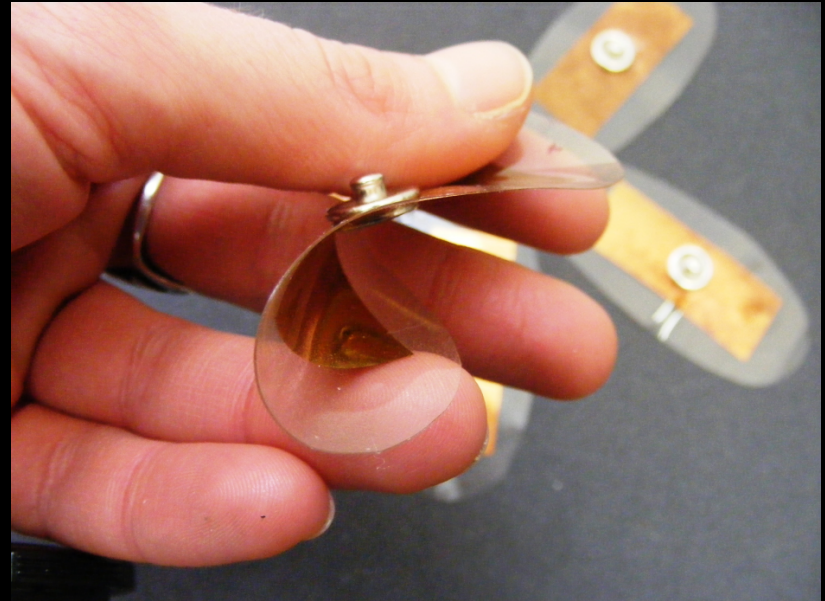
# Dry Electrodes Facilitate Remote Health Monitoring

**Johnson Space Center**

**NanoSonic Inc.  
Pembroke, VA**

## NASA Technology

- ◆ Without any doctors nearby, astronauts in space must monitor their own health, which poses challenges.
- ◆ The spaghetti-like straps of an electrocardiogram (EKG), used to track heart rate, are both uncomfortable and hard to manage in microgravity.



## Technology Transfer

- ◆ Johnson Space Center awarded NanoSonic with Small Business Innovation Research (SBIR) funding to develop a more space-friendly device.
- ◆ The company used its pre-existing Metal Rubber technology to create sensors that didn't require moisture to stick to skin and wiring that didn't get tangled.

## Benefits

- ◆ In 2011 NanoSonic began marketing its dry electrode sensors and also its EKGear sensor shirt, which transmits heart rate and cardiovascular activity wirelessly to a display.
- ◆ With the sensors able to monitor temperature, respiration, and location, hospitals, the military, and first responders can also benefit.